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10 January 1964

**MEMORANDUM OF ESTIMATE ON SOVIET CAPABILITIES FOR
STRATEGIC ATTACK
Issued 18 October 1963**

1. Estimates are based on all available intelligence resources including COMINT, ELINT, clandestine sources and CORONA



The latter is important because the Soviet rely on rail transportation for ICBM's.



transport facilities. We believe about 150 launchers are now operational and probably equipped with missiles.

3. In the past two years the Soviets have continued on their program of expanding their ICBM force. We believe that about 250 to 350 launchers will be operational by mid-'65 and about a third of this number will be hardened sites.

NOTE: The Air Force believes the higher number of the range is the more realistic.

4. The principal ICBM is the SS-7 which is comparable to our TITAN II with storable fuel and inertial guidance.

The earlier SS-6 capable of carrying a heavier payload apparently is considered obsolescent and there were only 3 test firings of this missile during 1963 compared to 25 of the SS-7's.

5. The SS-7 now carries a 3-megaton warhead. This can be increased to 6 megatons in 1964 and ultimately to about 13 megatons after modification of the missile.

A new missile, the SS-8, apparently is an alternate to the SS-7 though it may be somewhat larger. A still further development is indicated by some recent tests but the characteristics of the missile have not as yet been diagnosed.

6. The Soviets do not have a missile capability of lifting the 100-megaton warhead. We do not question that they will attempt to develop a sizeable booster capable of lifting this warhead. We estimate the reliability of the Soviet missiles in an operational status at 65% and the accuracy one to two nautical miles on target.

7. We have noted continued expansion of the Tyura Tam Missile Test Range and from this conclude that the Soviet missile program is not static but will be subject to further development and evaluation. We expect to see a smaller ICBM than the SS-7. We have no evidence of a Soviet capability for a solid fueled long-range missile. They do use solid fuels in field type missiles however.

8. Looking to 1969, we expect the Soviets to have between 400 and 700 ICBM's, a few of which - perhaps 25 to 50 - will be very large. Within the intelligence community the Navy favors the lower range as the Soviet objective, the Air Force leans to a higher range and feels that if a reliable small missile similar to the MINUTEMAN is developed, the Soviets could have at least 1,000 ICBM's on pads by 1969.

9. The MRBM program seems to be pretty well completed.

25X1 launch positions for missiles with ranges ranging from 1,000 to 2,200 miles, capable of carrying warheads of 2 to 3 megatons and perhaps more. We expect this development to level off at 700 to 750 launchers. These missiles are all on Soviet territory and are deployed to give complete coverage of Western Europe, Spain, British Isles, Japan, Formosa, Okinawa, parts of China and the Subcontinent.

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10. The Soviets have about 70 submarines capable of launching cruise missiles of 350-mile range. 70 are nuclear-powered. We estimate this force will reach the level of 105 to 140 by 1969.

We have positive evidence the Soviets are experimenting with and have fired a submerged ballistic missile which we believe to be of 700-mile range.

The submarines carry 2 or 3 missiles per submarine.

11. There is no appreciable change in the status of the Soviet long range aviation capability. They have about 200 heavy bombers and tankers and about 1,000 medium bombers.

They have developed a medium bomber known as the "Blinder" which has a supersonic capability.

The Air Force believes the Soviets will develop a long range supersonic bomber. They have this technical capability. We have no evidence to support or deny their intentions.

12. The significant observations are:

a. Probable development of a large missile capable of lifting a 100-megaton bomb.

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b. Observed activity at Tyura Tam indicates Soviet ICBM efforts in evolutionary phase.

c. The degree of hardening of bases has serious effect on strategy.

13. Reference to the anti-ballistic missile, our conclusion is that after 8 years of R & D and a major investment, the Soviet has not developed an effective and reliable ABM system but we believe the Soviets will not approve large expenditures or wide-spread deployment of the present system which we have observed at Sary Shagan and at Leningrad.

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*Transcript was taken - it is
with regular files in Records
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